Safety Data Sheet

4650 EVER COLOR Q PART A

Safety Data Sheet dated: 4/2/2019 - version 6

Date of first edition: 3/25/2015

1. IDENTIFICATION

Product identifier

Mixture identification:

Trade name: 4650 EVER COLOR Q PART A

Recommended use of the chemical and restrictions on use

Recommended use: Epoxy grout

Restrictions on use: N.A.

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Company: MAPEI CORP. (USA and Puerto Rico)
1144 East Newport Center Drive
33442 - Deerfield Beach - FL - USA
Phone: 954-246-8888

Emergency 24 hour numbers:

(USA) CHEMTREC 1-800-424-9300

(Canada) CANUTEC 1-613-996-6666

2. HAZARD(S) IDENTIFICATION

Classification of the chemical

Skin Irrit. 2	Causes skin irritation.
Eye Irrit. 2A	Causes serious eye irritation.
Skin Sens. 1B	May cause an allergic skin reaction.
Aquatic Chronic 2	Toxic to aquatic life with long lasting effects.

Label elements

Pictograms and Signal Words

Warning

Hazard statements:

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements:

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust or mist.
P264	Wash skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+P313	IF exposed or concerned: Get medical advice/attention.
P314	Get medical advice/attention if you feel unwell.
P321	Specific treatment (see supplementary instructions on this label).
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P391	Collect spillage.
P405	Store locked up.
P501	Dispose of contents/container in accordance with applicable regulations.

Ingredient(s) with unknown acute toxicity:

None

Hazards not otherwise classified identified during the classification process:

None

This product contains crystalline silica (quartz sand). IARC has classified crystalline silica as a Group 1 carcinogen. Both IARC and NTP consider silica as a known human carcinogen. Evidence is based on the chronic and long-term exposure workers have had to respirable sized crystalline silica dust particles. Because this product is in liquid or paste form, it does not pose a dust hazard; therefore, this classification is not relevant. (Note: sanding of the hardened product may create a silica dust hazard)

This product contains titanium dioxide which IARC has classified as a Group 2B carcinogen (possibly carcinogenic to humans). Evidence is based on sufficient animal testing as a result of long-term inhalation at high concentrations of respirable amounts of titanium dioxide. Because this product is in liquid or paste form, it does not pose a dust hazard; therefore, this classification is not relevant. (Note: sanding of the hardened product may create a dust hazard)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

N.A.

Mixtures

Hazardous components within the meaning of 29 CFR 1910.1200 and related classification:

List of components

Quantity	Name	Ident. Numb.	Classification	Registration Number
50-75 %	Silica Sand	CAS:14808-60-7	STOT RE 1, H372; Carc. 1A, H350	
10-20 %	Bisphenol A epoxy resin	CAS:25085-99-8	Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Aquatic Chronic 2, H411; Skin Sens. 1B, H317	
10-20 %	Titanium dioxide	CAS:13463-67-7	Carc. 2, H351	
5-10 %	Alkyl epoxy resin	CAS:68609-97-2	Skin Irrit. 2, H315; Skin Sens. 1, H317	
2.5-5 %	Phenol, polymer with formaldehyde, glycidyl ether	CAS:28064-14-4	Skin Irrit. 2, H315; Skin Sens. 1, H317; Aquatic Chronic 2, H411	N.A.

4. FIRST AID MEASURES

Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

OBTAIN IMMEDIATE MEDICAL ATTENTION.

Obtain medical attention if skin related symptoms persist.

Remove contaminated clothing immediately and dispose of safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and the hazard label.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

Most important symptoms/effects, acute and delayed

Eye irritation

Eye damages

Skin Irritation

Erythema

Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO_2).

Unsuitable extinguishing media:

None in particular.

Specific hazards arising from the chemical

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

Hazardous combustion products: N.A.

Explosive properties: N.A.

Oxidizing properties: N.A.

Special protective equipment and precautions for fire-fighters

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

Methods and material for containment and cleaning up

Suitable material for taking up: absorbing material, organic, sand

Wash with plenty of water.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Exercise the greatest care when handling or opening the container.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

Conditions for safe storage, including any incompatibilities

Storage temperature: N.A.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

List of components with OEL value

Component	OEL Type	Country	Ceiling	Long Term mg/m3	Long Term ppm	Short Term mg/m3	Short Term ppm	Behaviour	Note
Silica Sand	ACGIH			0,025					A2 - Suspected Human Carcinogen;lung cancer;pulmonary fibrosis;
Titanium dioxide	OSHA			15					
	ACGIH			10					A4 - Not Classifiable

as a Human Carcinogen;lower respiratory tract irritation;

Appropriate engineering controls: N.A.

Individual protection measures

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Use adequate protective respiratory equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state: Liquid
Appearance and colour: paste
Odour: like: Ester
Odour threshold: N.A.
pH: N.A.
Melting point / freezing point: N.A.
Initial boiling point and boiling range: N.A.
Flash point: >100 °C (212 °F)
Evaporation rate: N.A.
Upper/lower flammability or explosive limits: N.A.
Vapour density: N.A.
Vapour pressure: N.A.
Relative density: 1.79 g/cm3
Solubility in water: Insoluble
Solubility in oil: N.A.
Partition coefficient (n-octanol/water): N.A.
Auto-ignition temperature: N.A.
Decomposition temperature: N.A.
Viscosity: N.A.
Explosive properties: N.A.
Oxidizing properties: N.A.
Solid/gas flammability: N.A.

Other information

Substance Groups relevant properties N.A.
Miscibility: N.A.
Fat Solubility: N.A.
Conductivity: N.A.

10. STABILITY AND REACTIVITY

Reactivity

Stable under normal conditions

Chemical stability

Data not available.

Possibility of hazardous reactions

None.

Conditions to avoid

Stable under normal conditions.

Incompatible materials

None in particular.

Hazardous decomposition products

None.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Toxicological information of the mixture:

There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.

Toxicological information on main components of the mixture:

Silica Sand	a) acute toxicity	LD50 Oral Rat = 500 mg/kg
Titanium dioxide	a) acute toxicity	LD50 Oral Rat > 10000 mg/kg
Alkyl epoxy resin	a) acute toxicity	LD50 Skin Rabbit > 3987 mg/kg LD50 Oral Rat = 17100 mg/kg
Phenol, polymer with formaldehyde, glycidyl ether	a) acute toxicity	LD50 Skin Rabbit > 5000,00000 mg/kg LD50 Oral Rat > 11400,00000 mg/kg

If not differently specified, the information required in the regulation and listed below must be considered as N.A.

a) acute toxicity

b) skin corrosion/irritation

c) serious eye damage/irritation

d) respiratory or skin sensitisation

e) germ cell mutagenicity

f) carcinogenicity

g) reproductive toxicity

h) STOT-single exposure

i) STOT-repeated exposure

j) aspiration hazard

Substance(s) listed on the IARC Monographs:

Silica Sand	Group 1
Titanium dioxide	Group 2B

Substance(s) listed as OSHA Carcinogen(s):

Silica Sand

Titanium dioxide

Substance(s) listed as NIOSH Carcinogen(s):

Silica Sand

Titanium dioxide

Substance(s) listed on the NTP report on Carcinogens:

Silica Sand

12. ECOLOGICAL INFORMATION

Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

List of components with eco-toxicological properties

Quantity	Component	Ident. Numb.	Ecotox Infos
50-75 %	Silica Sand	CAS: 14808-60-7	a) Aquatic acute toxicity : LC50 carp > 10000,00000 mg/L 72h

Persistence and degradability

N.A.

Bioaccumulative potential

N.A.

Mobility in soil

N.A.

Other adverse effects

N.A.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste must be handled in accordance with all federal, state, provincial, and local regulations. Consult authorities before disposal.

14. TRANSPORT INFORMATION

UN number

ADR-UN number: 3082

DOT-UN Number: UN3082

IATA-Un number: 3082

IMDG-Un number: 3082

UN proper shipping name

ADR-Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol A epoxy resin - Phenol, polymer with formaldehyde, glycidyl ether)

DOT-Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (Bisphenol A epoxy resin - Phenol, polymer with formaldehyde, glycidyl ether)

IATA-Technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol A epoxy resin - Phenol, polymer with formaldehyde, glycidyl ether)

IMDG-Technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol A epoxy resin - Phenol, polymer with formaldehyde, glycidyl ether)

Transport hazard class(es)

ADR-Class: 9

DOT-Hazard Class: 9

IATA-Class: 9

IMDG-Class: 9

Packing group

ADR-Packing Group: III

DOT-Packing group: III

IATA-Packing group: III

IMDG-Packing group: III

Environmental hazards

Marine pollutant: Yes

Environmental Pollutant: N.A.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

N.A.

Special precautions

Department of Transportation (DOT):

DOT-Special Provision(s): 8, 146, 173, 335, IB3, T4, TP1

DOT-Label(s): 9

DOT-Symbol: N/A

DOT-Cargo Aircraft: N/A

DOT-Passenger Aircraft: N/A

DOT-Bulk: N/A

DOT-Non-Bulk: N/A

Road and Rail (ADR-RID):

ADR exempt: No

ADR-Label: 9

ADR-Hazard identification number: 90

ADR-Transport category (Tunnel restriction code): 3 (E)

Air (IATA):

IATA-Passenger Aircraft: 964

IATA-Cargo Aircraft: 964

IATA-Label: 9

IATA-Subrisk: -

IATA-Erg: 9L

IATA-Special Provisions: A97 A158

Sea (IMDG):

IMDG-Stowage Code: Category A

IMDG-Stowage Note: -

IMDG-Subrisk: -

IMDG-Special Provisions: 274 335

IMDG-Page: N/A

IMDG-Label: 9

IMDG-EMS: F-A, S-F

IMDG-MFAG: N/A

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15. REGULATORY INFORMATION

USA - Federal regulations

TSCA - Toxic Substances Control Act

TSCA inventory:

All the components are listed on the TSCA inventory

TSCA listed substances:

Silica Sand	is listed in TSCA Section 8b
Bisphenol A epoxy resin	is listed in TSCA Section 8b
Titanium dioxide	is listed in TSCA Section 8b
Alkyl epoxy resin	is listed in TSCA Section 8b
Phenol, polymer with formaldehyde, glycidyl ether	is listed in TSCA Section 8b

SARA - Superfund Amendments and Reauthorization Act

Section 302 - Extremely Hazardous Substances:

no substances listed

Section 304 - Hazardous substances:

no substances listed

Section 313 - Toxic chemical list:

no substances listed

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act

Substance(s) listed under CERCLA:

no substances listed

CAA - Clean Air Act

CAA listed substances:

no substances listed

CWA - Clean Water Act

CWA listed substances:

no substances listed

USA - State specific regulations

California Proposition 65

Substance(s) listed under California Proposition 65:

Silica Sand	Listed as carcinogen
Titanium dioxide	Listed as carcinogen

Massachusetts Right to know

Substance(s) listed under Massachusetts Right to know:

Silica Sand

Titanium dioxide

Pennsylvania Right to know

Substance(s) listed under Pennsylvania Right to know:

Silica Sand

Titanium dioxide

New Jersey Right to know

Substance(s) listed under New Jersey Right to know:

Silica Sand

Titanium dioxide

Canada - Federal regulations

DSL - Domestic Substances List

DSL Inventory:

All the substances are listed in the DSL.

NDSL - Non Domestic Substances List

NDSL Inventory:

no substances listed

NPRI - National Pollutant Release Inventory

Substances listed in NPRI:

no substances listed

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16. OTHER INFORMATION

Code	Description
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H350	May cause cancer .
H351	Suspected of causing cancer .
H372	Causes damage to organs through prolonged or repeated exposure .
H411	Toxic to aquatic life with long lasting effects.

Safety Data Sheet dated: 4/2/2019 - version 6

Product code: 2962

Additional classification information

NFPA

HMIS Health: 1 = Slight

HMIS Health - Is health hazard chronic? Yes

HMIS Flammability: 1 = Combustible if heated

HMIS Reactivity: 0 = Minimal

HMIS P.P.E.: Safety glasses, gloves

NFPA Health: 1 = Slight

NFPA Flammability: 1 = Combustible if heated

NFPA Reactivity: 0 = Minimal

NFPA Special Risk: N.A.

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use. The information herein is presented in good faith and believed to be accurate as of the effective date given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

This document was prepared by a competent person who has received appropriate training.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

IMDG: International Maritime Code for Dangerous Goods.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
CLP: Classification, Labeling, Packaging.
EINECS: European Inventory of Existing Commercial Chemical Substances.
INCI: International Nomenclature of Cosmetic Ingredients.
CAS: Chemical Abstracts Service (division of the American Chemical Society).
GefStoffVO: Ordinance on Hazardous Substances, Germany.
LC50: Lethal concentration, for 50 percent of test population.
LD50: Lethal dose, for 50 percent of test population.
DNEL: Derived No Effect Level.
PNEC: Predicted No Effect Concentration.
TLV: Threshold Limiting Value.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
WGK: German Water Hazard Class.
KSt: Explosion coefficient.

Paragraphs modified from the previous revision:

- 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING
- 2. HAZARDS IDENTIFICATION
- 3. COMPOSITION/INFORMATION ON INGREDIENTS
- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 9. PHYSICAL AND CHEMICAL PROPERTIES
- 11. TOXICOLOGICAL INFORMATION
- 16. OTHER INFORMATION

Safety Data Sheet

4650 EVER COLOR Q PART B

Safety Data Sheet dated: 06/10/2019 - version 4

Date of first edition: 06/24/2015

1. IDENTIFICATION

Product identifier

Mixture identification:

Trade name: 4650 EVER COLOR Q PART B

Recommended use of the chemical and restrictions on use

Recommended use: Hardener for epoxy products

Restrictions on use: N.A.

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Company: MAPEI CORP. (USA and Puerto Rico)
1144 East Newport Center Drive
33442 - Deerfield Beach - FL - USA
Phone: 954-246-8888

Emergency 24 hour numbers:

(USA) CHEMTREC 1-800-424-9300

(Canada) CANUTEC 1-613-996-6666

2. HAZARD(S) IDENTIFICATION

Classification of the chemical

Skin Corr. 1B	Causes severe skin burns and eye damage.
Eye Dam. 1	Causes serious eye damage.
Skin Sens. 1B	May cause an allergic skin reaction.
Aquatic Chronic 3	Harmful to aquatic life with long lasting effects.

Label elements

Pictograms and Signal Words

Danger

Hazard statements:

H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements:

P260	Do not breathe mist/vapours/spray.
P264	Wash skin thoroughly after handling.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a doctor.

P321	Specific treatment (see supplementary instructions on this label).
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P405	Store locked up.
P501	Dispose of contents/container in accordance with applicable regulations.

Ingredient(s) with unknown acute toxicity:

None

Hazards not otherwise classified identified during the classification process:

None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

N.A.

Mixtures

Hazardous components within the meaning of 29 CFR 1910.1200 and related classification:

List of components

Quantity	Name	Ident. Numb.	Classification	Registration Number
20-25 %	Isophorone diamine	CAS:2855-13-2	Skin Corr. 1B, H314; Skin Sens. 1, H317; Aquatic Chronic 3, H412; Acute Tox. 4, H302; Acute Tox. 4, H312	
5-10 %	Benzyl alcohol	CAS:100-51-6	Acute Tox. 4, H302; Acute Tox. 4, H332; Eye Irrit. 2A, H319	
1-2.5 %	N,N'-DIMETHYLPROPANE-1,3-DIAMINE	CAS:111-33-1	Flam. Liq. 2, H225; Skin Corr. 1B, H314; Eye Dam. 1, H318	
1-2.5 %	Tetraethylenepentamine	CAS:112-57-2	Skin Sens. 1, H317; Aquatic Chronic 2, H411; Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Corr. 1B, H314	
1-2.5 %	DIMETHYLDIPROPYLENETRIAMINE	CAS:10563-29-8	Acute Tox. 4, H302; Acute Tox. 4, H312; Eye Dam. 1, H318; Skin Corr. 1A, H314; Skin Sens. 1B, H317; Aquatic Acute 2, H401	

4. FIRST AID MEASURES

Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

OBTAIN IMMEDIATE MEDICAL ATTENTION.

Obtain medical attention if skin related symptoms persist.

Remove contaminated clothing immediately and dispose of safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and the hazard label.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

Most important symptoms/effects, acute and delayed

Eye irritation

Eye damages

Skin Irritation

Erythema

Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO_2).

Unsuitable extinguishing media:

None in particular.

Specific hazards arising from the chemical

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

Hazardous combustion products: N.A.

Explosive properties: N.A.

Oxidizing properties: N.A.

Special protective equipment and precautions for fire-fighters

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

Methods and material for containment and cleaning up

Suitable material for taking up: absorbing material, organic, sand

Wash with plenty of water.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

Conditions for safe storage, including any incompatibilities

Storage temperature: N.A.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

No Data Available

Appropriate engineering controls: N.A.

Individual protection measures

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Use adequate protective respiratory equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state: N.A.

Appearance and colour: paste yellow

Odour: like: Amines
Odour threshold: N.A.
pH: N.A.
Melting point / freezing point: N.A.
Initial boiling point and boiling range: N.A.
Flash point: >100 °C (212 °F)
Evaporation rate: N.A.
Upper/lower flammability or explosive limits: N.A.
Vapour density: N.A.
Vapour pressure: N.A.
Relative density: 1.04 g/cm3
Solubility in water: Insoluble
Solubility in oil: N.A.
Partition coefficient (n-octanol/water): N.A.
Auto-ignition temperature: N.A.
Decomposition temperature: N.A.
Viscosity: N.A.
Explosive properties: N.A.
Oxidizing properties: N.A.
Solid/gas flammability: N.A.

Other information

Substance Groups relevant properties N.A.
Miscibility: N.A.
Fat Solubility: N.A.
Conductivity: N.A.

10. STABILITY AND REACTIVITY

Reactivity

Stable under normal conditions

Chemical stability

Data not available.

Possibility of hazardous reactions

None.

Conditions to avoid

Stable under normal conditions.

Incompatible materials

None in particular.

Hazardous decomposition products

None.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Toxicological information of the mixture:

There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.

Toxicological information on main components of the mixture:

Isophorone diamine	a) acute toxicity	LD50 Oral Rat = 1030 mg/kg
Benzyl alcohol	a) acute toxicity	LD50 Skin Rabbit = 2000,00000 mg/kg
		LC50 Inhalation Rat = 8,80000 mg/l 4h
		LD50 Oral Rat = 1230 mg/kg
Tetraethylenepentamine	a) acute toxicity	LD50 Skin Rabbit = 660 µL/kg
		LD50 Oral Rat = 2100 mg/kg

If not differently specified, the information required in the regulation and listed below must be considered as N.A.

a) acute toxicity

b) skin corrosion/irritation

c) serious eye damage/irritation

d) respiratory or skin sensitisation

e) germ cell mutagenicity

f) carcinogenicity

g) reproductive toxicity

h) STOT-single exposure

i) STOT-repeated exposure

j) aspiration hazard

Substance(s) listed on the IARC Monographs:

None

Substance(s) listed as OSHA Carcinogen(s):

None

Substance(s) listed as NIOSH Carcinogen(s):

None

Substance(s) listed on the NTP report on Carcinogens:

None

12. ECOLOGICAL INFORMATION

Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

List of components with eco-toxicological properties

Quantity	Component	Ident. Numb.	Ecotox Infos
20-25 %	Isophorone diamine	CAS: 2855-13-2	a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna 14,60000 mg/L 48h EPA a) Aquatic acute toxicity : EC50 Daphnia magna = 42,00000 mg/L - 24hr a) Aquatic acute toxicity : EC50 Algae Desmodesmus subspicatus = 37 mg/L 72h IUCLID a) Aquatic acute toxicity : EC50 Algae idus = 110,00000 mg/L 96h
5-10 %	Benzyl alcohol	CAS: 100-51-6	a) Aquatic acute toxicity : LC50 Fish Pimephales promelas = 460 mg/L 96h EPA a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus = 10 mg/L 96h EPA a) Aquatic acute toxicity : EC50 Daphnia water flea = 23 mg/L 48h
1-2.5 %	Tetraethylenepentamine	CAS: 112-57-2	a) Aquatic acute toxicity : LC50 Fish Poecilia reticulata = 420 mg/L 96h IUCLID a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 241 mg/L 48h IUCLID a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata = 21 mg/L 72h IUCLID

Persistence and degradability

N.A.

Bioaccumulative potential

N.A.

Mobility in soil

N.A.

Other adverse effects

N.A.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste must be handled in accordance with all federal, state, provincial, and local regulations. Consult authorities before disposal.

14. TRANSPORT INFORMATION

UN number

ADR-UN number: 2289
DOT-UN Number: UN2289
IATA-Un number: 2289
IMDG-Un number: 2289

UN proper shipping name

ADR-Shipping Name: ISOPHORONEDIAMINE
DOT-Proper Shipping Name: Isophoronediamine
IATA-Technical name: ISOPHORONEDIAMINE
IMDG-Technical name: ISOPHORONEDIAMINE

Transport hazard class(es)

ADR-Class: 8
DOT-Hazard Class: 8
IATA-Class: 8
IMDG-Class: 8

Packing group

ADR-Packing Group: III
DOT-Packing group: III
IATA-Packing group: III
IMDG-Packing group: III

Environmental hazards

Marine pollutant: No
Environmental Pollutant: N.A.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

N.A.

Special precautions

Department of Transportation (DOT):

DOT-Special Provision(s): IB3, T4, TP1
DOT-Label(s): 8
DOT-Symbol: N/A
DOT-Cargo Aircraft: N/A
DOT-Passenger Aircraft: N/A
DOT-Bulk: N/A
DOT-Non-Bulk: N/A

Road and Rail (ADR-RID):

ADR-Label: 8
ADR-Hazard identification number: 80
ADR-Transport category (Tunnel restriction code): 3 (E)

Air (IATA):

IATA-Passenger Aircraft: 852
IATA-Cargo Aircraft: 856
IATA-Label: 8
IATA-Subrisk: -
IATA-Erg: 8L
IATA-Special Provisions: A803

Sea (IMDG):

IMDG-Stowage Code: Category A
IMDG-Stowage Note: -
IMDG-Subrisk: -
IMDG-Special Provisions: -

IMDG-Page: N/A
IMDG-Label: N/A
IMDG-EMS: F-A, S-B
IMDG-MFAG: N/A

15. REGULATORY INFORMATION

USA - Federal regulations

TSCA - Toxic Substances Control Act

TSCA inventory:

All the components are listed on the TSCA inventory

TSCA listed substances:

Isophorone diamine	is listed in TSCA	Section 8b
Benzyl alcohol	is listed in TSCA	Section 8b
N,N'-DIMETHYLPROPANE-1,3-DIAMINE	is listed in TSCA	Section 8b
Tetraethylenepentamine	is listed in TSCA	Section 8b
DIMETHYLDIPROPYLENETRIAMINE	is listed in TSCA	Section 8b

SARA - Superfund Amendments and Reauthorization Act

Section 302 - Extremely Hazardous Substances:

no substances listed

Section 304 - Hazardous substances:

no substances listed

Section 313 - Toxic chemical list:

no substances listed

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act

Substance(s) listed under CERCLA:

no substances listed

CAA - Clean Air Act

CAA listed substances:

Benzyl alcohol	is listed in CAA	Section 112(b) - HON
Tetraethylenepentamine	is listed in CAA	Section 112(b) - HON

CWA - Clean Water Act

CWA listed substances:

no substances listed

USA - State specific regulations

California Proposition 65

Substance(s) listed under California Proposition 65:

no substances listed

Massachusetts Right to know

Substance(s) listed under Massachusetts Right to know:

Benzyl alcohol

Tetraethylenepentamine

Pennsylvania Right to know

Substance(s) listed under Pennsylvania Right to know:

Benzyl alcohol

Tetraethylenepentamine

New Jersey Right to know

Substance(s) listed under New Jersey Right to know:

Isophorone diamine

Tetraethylenepentamine

Canada - Federal regulations

DSL - Domestic Substances List

DSL Inventory:

All the substances are listed in the DSL.

NDSL - Non Domestic Substances List

NDSL Inventory:

List of substances included in the NDSL: N,N'-DIMETHYLPROPANE-1,3-DIAMINE cas: 111-33-1

NPRI - National Pollutant Release Inventory

Substances listed in NPRI:

no substances listed

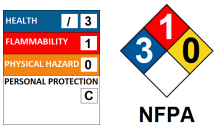
16. OTHER INFORMATION

Code	Description
H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H401	Toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Safety Data Sheet dated: 6/10/2019 - version 4

Product code: 2907

Additional classification information



HMIS Health: 3 = Serious

HMIS Health - Is health hazard chronic? No

HMIS Flammability: 1 = Combustible if heated

HMIS Reactivity: 0 = Minimal

HMIS P.P.E.: Safety glasses, gloves, chemical apron

NFPA Health: 3 = Serious

NFPA Flammability: 1 = Combustible if heated

NFPA Reactivity: 0 = Minimal

NFPA Special Risk: N.A.

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use. The information herein is presented in good faith and believed to be accurate as of the effective date given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

This document was prepared by a competent person who has received appropriate training.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

IMDG: International Maritime Code for Dangerous Goods.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

CLP: Classification, Labeling, Packaging.

EINECS: European Inventory of Existing Commercial Chemical Substances.

INCI: International Nomenclature of Cosmetic Ingredients.

CAS: Chemical Abstracts Service (division of the American Chemical Society).

GefStoffVO: Ordinance on Hazardous Substances, Germany.
LC50: Lethal concentration, for 50 percent of test population.
LD50: Lethal dose, for 50 percent of test population.
DNEL: Derived No Effect Level.
PNEC: Predicted No Effect Concentration.
TLV: Threshold Limiting Value.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
WGK: German Water Hazard Class.
KSt: Explosion coefficient.

Paragraphs modified from the previous revision:

- SECTION 1: Identification of the substance/mixture and of the company/undertaking
- SECTION 2: Hazards identification
- SECTION 3: Composition/information on ingredients
- SECTION 11: Toxicological information
- SECTION 12: Ecological information
- SECTION 15: Regulatory information
- SECTION 16: Other information